

**Remarks**

The pending claims are 4-8 and new claims 34-39. Claims 4-8 are amended, claims 1-3 and 10-33 were withdrawn, and claim 9 is cancelled herewith. Support for the newly-added claims is found throughout the specification, examples, and original claims. All references to the specification are for the substituted specification. In particular:

Support for claims 34-38 is found at page 7, paragraphs 31-32.

Support for claim 39 is found at page 13, paragraph 46.

**Drawings**

The drawings (i.e. Figures 7, 9, and 11) were objected to because of the lack of sequence identifiers. Applicants believe that they have overcome this objection by adding sequence identifiers in the Description of the Drawings section of the substitute specification.

**Specification**

The specification was objected to because of informal abbreviations and minor typographical errors. Applicants have made several revisions to the body of the specification to correct the typographical and grammatical errors mentioned by the Examiner, as well as additional minor corrections in the specification. A substitute specification with markings to reflect these changes and a clean copy are submitted herewith for the Examiner's convenience and pursuant to the rules. Applicants respectfully submit that no new matter has been introduced by way of this substitution. Applicants thank the Examiner for noting these informalities and have corrected the specification accordingly. Should any remaining informalities be present, the Examiner is invited to direct Applicants to such inappropriate text for prompt correction.

**Sequence Rules**

Applicants submit herewith a replacement Computer Readable Form (CFR) Sequence Listing. The replacement Sequence Listing is meant to identify the sequences that were previously and unintentionally unidentified in the specification and the Figures. A paper copy of the replacement Sequence Listing is included herewith for the Examiner's convenience.

**Claim Objections**

Claim 9 has been objected to for depending from a rejected claim. Applicants respectfully submit that the rejection is moot in view of the amendment to claim 8. Withdrawal of the objection is, accordingly, respectfully requested.

## **Claim Rejections**

### Claim Rejections Under 35 U.S.C. §101

Claims 4-7 have been rejected for being drawn to non-statutory matter, particularly, for being directed to proteins that were deemed products of nature. Pursuant to the Examiner's recommendations, Applicants have added the term "isolated" to the claims, and thus believe that the §101 rejection has been overcome.

### Claim Rejections Under 35 U.S.C. §112

Claim 6 was rejected under 35 U.S.C. §112, first paragraph, for lacking enablement. Applicants believe that the claim is fully enabled in light of the ATCC accession number and because it was deposited under the Budapest Treaty.

In particular the Examiner rejected BBP1 protein under 35 U.S.C. §112, first paragraph, for lacking enablement. Applicants respectfully traverse. One skilled in the art can make the protein from the cDNA clone deposited under accession number ATCC 98617. Translation is described in any basic molecular biology book (see, e.g., Alberts et al., *Molecular Biology of the Cell*, 3<sup>rd</sup> ed. (New York: Garland Publishing, Inc.) chapter 6).

The specification was rejected 35 U.S.C. §112, first paragraph for lacking enablement. Applicants draw the Examiner's attention to the specification at p. 7, paragraph 32 where it states: "All deposits referred to herein refer to deposits with the ATCC and all such deposits will be maintained under the terms of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure and under conditions that will make them available to the public as of the issue date of any patent granted from this application." The specification also provides the correct address for the American Type Culture Collection at p. 7, paragraph 32. Applicants believe that this information satisfies the Examiner's criteria for public access. The Examiner is invited to correct Applicants if they are wrong in holding this belief.

Claim 8 was rejected under 35 U.S.C. §112, first paragraph. Applicants have amended claim 8 to claim the amino acid sequence enabled by the specification as suggested by the Examiner.

Claim 8 was also rejected under 35 U.S.C. §112, second paragraph for indefiniteness. The claim has been amended to only refer to "a peptide sequence" rather than both a peptide sequence and a heterologous protein. New claim 36 covers a fusion protein with a heterologous protein linked to SEQ ID NO: 2. Heterologous is defined in the art to be "Derived from or associated with a species different from that being referred to" [Singleton

and Sainsbury, *Dictionary of Microbiology and Molecular Biology*, 3<sup>rd</sup> ed. (Chichester: John Wiley & Sons) 368].

Applicants respectfully submit that the 35 U.S.C. §112, first and second paragraph rejections have been overcome and Applicants request that the §112 rejections be reconsidered and withdrawn.

Applicants believe that this application is in condition for allowance. Favorable consideration and prompt allowance of the claims are earnestly solicited. Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



Raymond Van Dyke  
Reg. No. 34,746

Date: February 11, 2004

Nixon Peabody LLP  
Suite 900  
401 9<sup>th</sup> Street  
Washington D.C. 2004-2128  
Tel: (202) 585-8250  
Fax: (202) 585-8080